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ABSTRACT

Rockland Community College's (RCC) Developmental Studies Department serves students in need of remedial/developmental education, and more than 40% of RCC's entering freshmen are enrolled in the department yearly. The federally funded Special Services Project provides supplemental tutorial services for the most severely financially and educationally disadvantaged students enrolled in Developmental Studies courses. Part I of this report describes the department, which provides assessment, placement, and advisement services, College Skills and English as a Second Language (ESL) courses, and tutorial services. This section also describes the physical facilities of the department. Part II describes the 1988-89 activities and accomplishments of the Special Services Project, including a description of sites at which courses and services were offered, a profile of the clientele, staff development activities of program personnel, efforts to improve articulation with other college personnel, and the results of a student evaluation of the program. Part III provides a summative evaluation of the project, focusing on the achievement gains of students enrolled in College Skills courses in reading, writing, and mathematics. Part IV presents a comparative analysis of the student populations served by RCC's ESL, College Skills, and Special Services programs, and of the students served at the three different ESL sites. Finally, Part V presents conclusions and recommendations. RCC's competency assessment policy is appended. (AYC)

DEVELOPMENTAL STUDIES DEPARTMENT

SPECIAL SERVICES PROJECT

ROCKLAND COMMUNITY COLLEGE

1988-1989

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PREFACE

Rockland Community College (RCC), an open access Community College, functions under the program of the State University of New York. The College is located in a suburban area 35 miles north of New York City. While Rockland County is considered one of the most affluent counties in the state there are pockets of poverty with a substantial number of Blacks and immigrants (largely Hispanic and Haitian) located within the county. The College has expressed in its mission statement its commitment to serve a wide range of clientele and to provide services necessary to meet the needs of the clientele.

The Developmental Studies Department, established as a College department in the Fall 1987, serves students in need of remedial/developmental services. More than 40% of the entering freshmen who are identified through the College's competency assessment process are enrolled in the department yearly.

The following report: (1) describes the services of the department and of the federally funded Special Services Project which provides supplemental tutorial services for the most severely financially and educationally disadvantaged students enrolled in Developmental Studies courses and (2) provides an evaluation of student progress in reading, writing, English language development and mathematics during the academic year, 1988-1989. Recommendations for program and curriculum development are also included.

DEVELOPMENTAL STUDIES DEPARTMENT

The Developmental Studies Department provides courses and services designed to prepare students lacking college-level skills to enter college courses and to complete a college degree or certificate. The department currently offers College Skills (CSK) courses which help native American students develop reading, writing, mathematics, and study skills and English As A Second Language (ESL) courses which assist students whose native language is not English develop oral language, reading, writing, and study skills. The students in College Skills characterize the full range (age, sex, ethnic backgrounds, religions, social class) of clientele at the College. While the ESL enrollment continues to include some 250 students yearly from abroad, the majority of the students in ESL classes (84%) are first generation residents in Rockland County.

Individual assessment and advisement, small group and individual counseling and tutorial services are provided for students enrolled in College Skills and ESL courses and the department continues to provide counseling and tutorial services for College Skills and ESL students who move into the College mainstream as well.

Developmental courses and tutoring in specific areas such as spelling, vocabulary development, and effective listening are offered by Developmental Studies for all Rockland students who can benefit. The department also serves as a faculty development and resource center -

providing consultation with College faculty members, coordinated efforts to develop courses which include study strategies related to specific content, workshops and seminars, identification and development of resource materials,and publication of papers and materials. In addition, the Chairperson of the Developmental Studies Department is responsible for coordinating all College - wide tutorial services for disadvantaged students and for providing College supervision of the Special Services Project.*

A diversified staffing model is utilized to provide a maximum of individualized instruction to meet the diverse needs of the students. The staff includes a Chairperson, College Skills Coordinator, English As A Second Language Coordinator, 7 full time instructors, 3 full time counselors, some 35 adjunct instructors and counselors and some 25 teaching assistants in addition to one full time and one part -time clerical assistant.

ASSESSMENT, PLACEMENT, ADVISEMENT

Students are placed in College Skills or ESL as a result of English and Mathematics assessments (See Appendix A). The assessment process is designed to ensure that all students are placed into course work appropriate to their skills.

* Title IV of the Act for Special Programs for Students from Disadvantaged Backgrounds.

Upon acceptance to the College all entering students who have not previously attended college and are planning full time enrollment are required to take the RCC English and Mathematics Placement Examinations before registering for courses. Part-time students who intend to register for initial English language courses or credit bearing mathematics courses are also required to complete the examinations. All other part-time students enrolling for less than twelve credits must also take the examinations prior to registering for their sixteenth degree credit. The English Placement Examination consists of an evaluation of reading comprehension (Comprehension Section of Descriptive Tests of Language Skills - DTLS) and a writing sample on a given topic scored holistically by trained readers. The Mathematics Placement Examination includes an in-house computation section which students are required to take and an algebra section which students are encouraged to take.

After placement into College Skills or ESL each student has a conference with Developmental Studies Department instructors and counselors for needs assessment and to determine a course of study. Students are assigned to non-credit College Skills or ESL courses until re-assessment shows that they are ready to move into mainstream courses. Some, when the appropriate skill level has been reached, may select carefully chosen credit - bearing courses while they are enrolled in College Skills or ESL. The College Skills needs assessment is conducted at specific times throughout the academic year and the summer. Students are provided a general orientation to the College and College Skills, a

tour of the campus and referral to College counselors who determine financial aid eligibility and assess each student's full financial need. College Skills instructors explain the College assessment test results and the content of the various College Skills courses to which students have been assigned. Department counselors discuss with the students their vocational objectives and options and the estimated number of semesters they are likely to be in College Skills and then assist the students in selecting courses and completing the registration process.

During the English As A Second Language needs assessment process, which is scheduled during College registration periods, the students also receive orientation and referral for financial aid counseling. They participate in additional ESL in-house testing in English language development, reading and writing for placement in specific ESL courses. The ESL instructors also explain to the students the test results and the content of the courses to which students are assigned. English As A Second Language instructors and/or Developmental Studies Department counselors then discuss with students their vocational objectives and options and the estimated number of semesters they are likely to be in ESL and assist the students in selecting courses and completing the registration process.

COLLEGE SKILLS/ESL COURSES

New students enrolled in College Skills full time are placed in one of four levels of the non-credit courses,

Communication Skills (CSK011-014), Communication Skills Reinforcement (CSK021-024), and Developmental Course II (individualized learning activities and computer assisted instruction-CAI) based on their scores on the English Placement Examination. The courses are competency based and incorporate objectives in reading, writing, critical thinking and study skills. Students also enroll in Strategies for College Success (CSK031) and Understanding Human Behavior (CSK032). The first course concentrates on an orientation to the nature of higher education with an emphasis on the structure at Rockland Community College and on the development of effective study skills while the second course deals with the fundamentals of psychology. Students also enroll in a counseling seminar for an additional two credit hours. Depending on their curriculum goals and current time commitments new students may or may not enroll in Mathematics Skills (CSK065) for an additional four contact hours plus Developmental Course II which provides up to six hours of individualized learning activities. Exit criteria are specified for successful completion of each level of Communication Skills and each module of Mathematics Skills. As they progress through the College Skills courses students are permitted to enroll in some additional credit courses which have been approved by Department Chairpersons and Program Coordinators as appropriate at specific levels of reading and writing proficiency. Part-time students enroll in one of six levels of Communication Skills courses and counseling for a total of six contact/credit hours per semester.

Students who have met the minimum competency in reading on the English Placement Examination but have not reached the minimum competency in writing are assigned to Introduction to College Writing (CSK028). Those students who have met the minimum competency in writing but have not reached the minimum competency in reading are permitted to enroll in English Composition I, (ENG101) but they must also enroll concurrently in Efficient Reading (CSK029). In addition to regular sections of English Composition I, the College also offers several special emphasis sections. Often after passing into the mainstream College Skills students will enroll in ENG101 EGR for additional academic support and ESL students will enroll in ENG101 International designed for students for whom English is a second language.

Students enrolled in Communication Skills courses take all or part (reading/writing) of the English Placement Examination at the end of each semester until they have met the minimum competencies in reading and writing required for passing into the College mainstream. A modified mastery approach incorporating mediated instruction is utilized in Mathematics Skills. Therefore, students are not required to retake the Mathematics Placement Examination but they must master at 100% proficiency each module to which they have been assigned in Mathematics Skills before being permitted to take mainstream mathematics courses. Some students may achieve scores on the Mathematics Placement Examination which will permit them to enroll in Elementary Algebra for College Students (MAT101) with supplementary College Skills modules in Algebra Reinforcement (CSK049) as well.

New students assigned to ESL courses full time may be placed in one of seven levels of the course, English for Speakers of Other Languages, based on their scores on various instruments including the English Language Institute Test. The course incorporates objectives in speaking, listening, reading and writing. A full program of study consists of a maximum of 18 hours which includes a reinforcement module incorporating individualized and small group activities as well as computer assisted instruction and counseling.
Students also enroll in various approved bilingual courses and others taught in English while taking ESL courses. Part-time students enroll in one of seven levels of ESL courses for a total of six contact hours per semester.

PHYSICAL FACILITIES

College Skills and English As A Second Language courses are offered at the College's main campus in Suffern and at two Local Learning Centers in Haverstraw and Spring Valley. The majority of the students served in Haverstraw are of Hispanic backgrounds while those enrolled at the Spring Valley campus are largely Haitian. The Haverstraw Center located at 15 West Broad Street is in downtown Haverstraw while the Spring Valley Center is in a former elementary school at 185 North Main Street, just a few blocks from the downtown area.

Space is designated on Main Campus and at the two Centers for faculty and staff offices, classrooms and areas for

individualized learning activities and CAI tutorials. On Main Campus individualized learning activities are provided in the Individualized Learning Activities Center and CAI tutorials are provided in the Computer Assisted Instruction Laboratory. Both the Haverstraw and Spring Valley Center have a Student Development Center which serves to support individualized learning activities and CAI tutorials.

SUPPLEMENTAL TUTORIAL SERVICES

While small group and individualized tutoring and CAI tutorials are provided for students enrolled in College Skills and English As A Second Language courses College resources are limited and are supplemented by funding provided through the Vocational Educational Act (VEA), Educational Opportunity Program (EOP) and the Special Services Project (SSP). Special Services Project funding is designed to assist those students assigned to College Skills who are low income, first generation college students and who are the most severely educationally disadvantaged or who have the most severely limited English speaking ability among the CSK/ESL student population but who have the academic potential to graduate from college.

Monies from the VEA Disadvantaged grant focus on services for disadvantaged students enrolled in College Skills or ESL courses to enable them to be successful in occupational education programs. Educational Opportunity Program funds provide educationally related support services and financial assistance to those students whose educational and economic circumstances have limited their post secondary education opportunity.

SPECIAL SERVICES PROJECT 1988-1989

The Special Services Project provides supplemental tutoring for 200 of the more than 2000 students enrolled in College Skills and English As Second Language courses who meet the Project's eligibility criteria* and who have the greatest educational need based on assessment test scores and placement levels in College Skills and ESL courses. These 200 students represent the highest risk group in the College and are assumed to be those most likely to show poor achievement and high drop out rates. Therefore, the Special Services Project was designed to meet the following objectives:

1. 75-85% of the project students will remain in good standing at the College.
2. 60% of the project students will receive an associate degree or certificate or will transfer to another institution to complete their college degree.

SPECIAL SERVICES PROJECT SITES

In the academic year, 1988-1989, the Special Services Project served 200 students enrolled in College Skills and

* Amendment to Section 04 subpart 4 of part A of Title IV of the Act for Special Programs for Students from Disadvantaged Backgrounds. Federal Register, Vol. 47, No. 42, Wednesday, March 3, 1982 Rules and Regulations.

ESL courses at the Main Campus (day/evening) and at the Local Learning Center in Haverstraw (day/evening) and Spring Valley (evening).

Main Campus Project tutorial facilities are in the Lester E. Rounds Instructional Technology Center in the Library Media Center. Other activities in this central location include the Pass Tutoring Program, the Mediated Mastery Instructional System and the Computer Assisted Instruction Laboratory. The project office which provides space for the Project Director and the Assistant to the Project Director as well as project files is located within the Center. A private cubicle for use by project tutors is located nearby. Several large storage cabinets are utilized to store instructional supplies (texts, workbooks, taped delivery systems, worksheets) for use by project students and tutors. Individualized and small group tutorial sessions took place within the Center and CAI sessions were conducted in the Computer Assisted Instruction Laboratory where 30 microcomputers are available for student use.

Tutorial services and CAI tutorials were offered in the Student Development Center in Spring Valley. An extensive storage area for instructional materials as well as office space for project tutors is provided in the Center. Six microcomputers are available for student use. At the Haverstraw Local Learning Center tutorial services also were offered in the Student Development Center. Again, instructional materials and six microcomputers are available for student use.

CLIENTELE

Of the 200 students in the project all were first generation college students. A total of 133 of the students were both economically disadvantaged with deprived educational backgrounds or limited English language ability and 67 were identified as having deprived educational backgrounds or limited English language ability.

Participants selected for the project on the basis of deprived educational background consisted of: (1) those students from College Skills courses who scored the lowest on the RCC English Placement Examination and/or the Mathematics Placement Examination and (2) those students who were initially identified as Special Services Project eligible while enrolled in College Skills and passed into the mainstream English Composition I EGR or Elementary Algebra for College Students courses.

Participants selected for the project on the basis of limited English speaking ability consisted of: (1) those students from the ESL courses who scored the lowest on the RCC English Placement Examination and/or the Mathematics Placement Examination and (2) those students who were initially identified as Special Services Project eligible while enrolled in English As A Second Language and passed into the mainstream English Composition I International and/or Elementary Algebra for College Students courses.

A total of 59 of the students were enrolled in College Skills courses and 141 were enrolled in ESL courses (Main 82; Haverstraw 40 ; Spring Valley 19).

There were 84 (42%) males and 116 (58%) females. The group included 1 American Indian/Alaska Natives (0.5%), 24 Asian/Pacific Islanders (12%), 87 Blacks (43.5%), 65 Hispanics (32.5%), and 23 Whites other than Hispanic (11.5%). The ages of the total group ranged from 17 to 55 . (mean =28). The median age of the group was 25.5 . The English As A Second Language group's mean age was 29.3 (Median age = 27.0) and the College Skills group's mean age was 25.3 (median age = 20).

SERVICES

Students were recommended for the Special Services Project tutoring by College Skills and ESL instructors and selected for the project by the Project Director. Although the instructors provided the basic prescription for tutorial services (reading, writing, study skills, English language skills, mathematics) the project tutors diagnosed the specific needs for additional individualized support for each participant. The support services included:

(1) A minimum of one hour per week of tutoring (individualized or small group) for each project participant enrolled in College Skills, English As A Second Language, mainstream English or

mathematics courses.

(2) A minimum of two hours per week of computer assisted instruction for practice and drill for each project participant enrolled in College Skills, English As A Second Language, mainstream English or mathematics courses.

Tutorial forms including diagnostic, prescriptive and evaluation information were maintained for each project participant. The tutorial forms were filed in the project office. Periodic review of progress was made by the Project Director, and completion of the tutorial prescription was considered the student's responsibility. Needs assessment was continuous with checkpoints built in to insure review of the prescription and revision when necessary (See Appendix B).

The tutors and project students together developed a semester workplan which specified the objectives to be met, the means by which the objectives would be accomplished and procedures for evaluating progress. The tutors kept the instructors informed of student progress, both on an informal basis and through written mid-term evaluations.

Students used a variety of instructional materials purchased through project funds: texts, workbooks, readers, worksheets, math manipulative and language tapes as well as CAI software for reading comprehension, grammar, speed reading, vocabulary development, logic and critical thinking.

Students also learned basic word processing and then utilized the word processor to complete tutorial and in class writing assignments.

STAFF DEVELOPMENT

New project staff members attended preservice training workshops prior to the beginning of tutoring in the Fall Semester, 1988 and in January, 1989, prior to the beginning of spring tutoring. New project staff members received a copy of the Special Services Project Tutorial Manual and Project Taxonomy of Materials. Topics covered in pre-service training included: (See Appendix B and C)

1. Project design
2. Nature of the clientele
3. Philosophy and rationale of the project
4. Roles and responsibilities of the staff
5. Needs Assessment and placement
6. Assessment and diagnostic instruments
7. Tutorial Forms
8. Instructional Materials
9. Cognitive styles and affective characteristics of clientele
10. Formal and informal diagnosis
11. Integration of study skills and content areas
12. Fostering cultural pluralism

The workshops were conducted by the Project Director. Consultants from inside the College (Instructors of College

Skills, English As A Second Language, English and Mathematics and the Speech Clinic Coordinator) were also engaged to deliver presentations.

Weekly training sessions for the tutorial staff dealt with needs and issues which were identified during pre-service training and throughout the course of the project. Some of the topics covered during recent sessions include:

1) Fostering students' metacognitive skills
2) Computer Assisted Instruction and word processing
3) The effect of cultural differences on the ESL tutoring environment
4) Strategies for allaying students' test anxiety
5) Tutoring the student with a physical/learning disability.

Several weekly training sessions were devoted to tutors' sharing of ideas and strategies for use in project tutoring. Tutors delivered a mini-presentation of the instructional strategy using appropriate materials. Tutors then discussed application of the strategy to individual students.

All project staff members were encouraged to attend College-sponsored faculty development workshops in January and June. The Project Director and several project tutors attended several College workshops dealing with English as a Second Language, College Skills, disabled students, and racism.

In March of 1989 The Project Director and several Project tutors attended the Critical issues in Tutoring and Tutor Training Conference in New York City in order to share information and gain new information. Information and materials gathered from the conferences were shared with all project tutors during weekly meetings. The Project Director also attended a U.S. Department of Education Inservice Training Session for TRIO Personnel which dealt with preparation for a federal site visit. In September of 1988, the Project Director was a co-presenter (with the Chairperson of the Developmental Studies Department) of "Maintaining Access, Excellence and Retention: Adaoptable strategies for Developmental Programs" at the National Council of Educational Opportunites Association Annual conference.

ARTICULATION WITH COLLEGE PERSONNEL

The Project Director had regular and on going contact with the Developmental Studies Department. She met regularly with the Chairperson of the Department, who provides direct College supervision of the project, to discuss administrative and curriculum issues. The Director participated in Developmental Studies Department Staff Meetings and met with the Coordinators of College Skills and ESL to establish overall tutorial objectives and procedures. The Director and project tutors also met regularly with the instructors of project students in order to establish specific tutorial objectives and to obtain prescriptions for tutorial activities.

The Director also met on numerous occasions with various College personnel such as the Project Officer, Director of Administrative Services, Director of Plant Facilities, Director of Institutional Research, Director of Financial Aid, Director of the Educational Opportunity Program (EOP), and the Coordinators of the Local Learning Centers in Haverstraw and Spring Valley.

STUDENT EVALUATION OF SERVICES

In order to evaluate Special Services Project tutorial services students completed a student survey form which was prepared in Fall of 1987, with the assistance of Dean Laura Harckham of the R.C.C. Office of Instructional and Community Services.

During the 1988/89 academic year survey results were overwhelmingly positive; indeed, data indicates that 100% of the students surveyed felt that the tutor was helpful and gave them work that they needed. In addition, 95% of the students indicated that they could write and/or read better because of the tutoring. When responding to the question, "What was most helpful in improving your reading and writing" many students specifically mentioned the tutor in their responses. Student responses included comments such as. "she's a good tutor and she explains everything," " I understand when she explains the grammar," "the tutor helps me speak better English," "she gives me work that is helful," and "the tutor wants me to do my best."

As was the case in 1987/1988, when students were asked to provide recommendations for improving the tutoring, the only "suggestion" indicated was that further tutoring time would be beneficial.

SUMMATIVE EVALUATION

COLLEGE SKILLS

The achievement of students enrolled in College Skills courses in the areas of reading, writing and mathematics during the 1988-1989 academic year will be described in this section.

READING

Students' performance in reading was assessed using the Descriptive Tests of Language Skills (DTLS) in both the Fall and the Spring semesters. The DTLS serves as the reading assessment instrument for all students entering Rockland Community College.

The DTLS results for the Fall semester, 1988 are summarized in Table 1. During the Fall semester all sub-groups of College Skills except level CSK 011/012 made statistically significant gains in reading. Table 2 shows the results for Spring 1989. Sub-groups CSK013 and CSK071 did not demonstrate significant gains, but the other three levels of College Skills did show gains in reading. Of note in this table is that students in CSK014 and CSK029 (the highest levels of College Skills) achieved mean post-test scores which exceeded the College cut-off of scaled score, 11. Table 3 shows the results for those students who were enrolled in College Skills for both the Fall and Spring semesters. Students enrolled in CSK014 and CSK029

demonstrated statistically significant gains. Those few students enrolled at other levels did not demonstrate significant gains.

TABLE 1

DTLS PRE TO POST-TEST SCORES
FOR COLLEGE SKILLS STUDENTS
BY LEVEL - FALL 1988

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
CSK011/12	20	3.50	4.02	4.85	4.30	1.20	NS
SS	2	1.50	.71	1.00	.00	1.00	NS
no	18	3.72	4.18	5.28	4.32	1.25	NS
CSK013	58	5.72	2.90	8.66	4.76	5.02	.000
SS	15	4.60	2.44	6.80	3.59	2.06	.058
no	43	6.12	2.96	9.30	4.98	4.57	.000
CSK014	43	7.77	2.46	10.30	4.91	3.59	.001
SS	6	7.50	1.05	9.67	3.50	1.22	NS
no	37	7.81	2.62	10.41	5.13	3.33	.002
CSK029	63	8.86	1.06	13.40	5.03	6.90	.000
SS	1	8.00		7.00			
no	62	8.87	1.06	13.50	5.01	6.99	.000
CSK071	16	7.25	2.67	9.88	4.94	2.57	.021
SS	1	9.00		12.00			
no	15	7.13	2.30	9.73	5.08	2.38	.032

TABLE 2

DTLS PRE TO POST-TEST SCORES
FOR COLLEGE SKILLS STUDENTS
BY LEVEL - SPRING 1989

	Pre-Test			Post-Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
CSK011/012	9	2.11	1.17	7.67	6.21	3.05	.016
SS	6	2.33	1.21	9.83	6.37	3.23	.023
no	3	1.67	1.16	3.33	3.22	1.39	NS
CSK013	24	8.33	3.76	9.96	4.22	1.85	NS
SS	2	6.00	1.41	4.00	2.83	-2.00	NS
no	22	8.35	3.85	10.50	3.93	2.11	.047
CSK014	[illegible]	7.89	1.17	14.33	2.50	7.43	.000
SS	0						
no	9						
CSK029	37	9.00	.97	12.65	5.54	4.13	.000
SS	10	8.70	1.25	11.20	6.25	1.26	NS
no	27	9.11	.85	13.19	5.28	4.18	.000
CSK071	19	6.26	1.94	8.84	5.41	2.03	.058
SS	0						
no	19						

TABLE 3

DTLS PRE TO POST-TEST SCORES
FOR COLLEGE SKILLS STUDENTS
BY LEVEL - FALL 1988 AND SPRING 1989

	Pre-Test			Post-Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
CSK011/012	1	1.00		3.00			
SS							
no							
CSK013	5	5.00	1.00	7.20	3.11	1.90	NS
SS	1	5.00		10.00			
no	4	5.00	1.16	6.50	3.11	1.26	NS
CSK014	20	6.50	1.40	8.85	3.83	2.73	.013
SS	5	6.60	1.52	6.60	2.19		
no	15	6.47	1.41	9.60	4.01	3.05	.009
CSK029	12	8.17	1.75	10.42	3.70	2.20	.05
SS	3	8.67	2.31	10.00	2.65	.80	NS
no	9	8.00	1.66	10.56	4.13	1.99	NS
CSK071	2	4.50	4.95	6.00	5.66	3.00	NS
SS	1	1.00		2.00			
no	1	8.00		10.00			

WRITING

Students' writing competency was assessed through the writing sample which is part of the English Placement Examination. This test, administered to all incoming students at Rockland Community College, served as both a pre-test and as a placement indicator (as do DTLS scores) for students.

Writing samples were scored holistically by a team of trained readers. Each essay was scored twice, independently, and the sum of the two scores is the student's writing score. Native English speaking students whose scores fall below the minimum competency level established by the College (score = 6) were assigned to College Skills courses. Students' post-tests produced at the end of the semester were scored similarly and in blind readings with essays from new incoming students. The results in writing for the component sub-groups in College Skills are reported in Table 4 for the Fall semester, Table 5 for the Spring semester and Table 6 for those students enrolled as continuing students for both Fall and Spring semesters.

In Fall, 1988 all students enrolled in College Skills courses except those enrolled in CSK071, the evening course for part-time students, demonstrated statistically significant gains in writing. In Spring, 1989, students in CSK013, CSK028 and CSK071 all demonstrated statistically significant gains in writing. None of the groups enrolled

for both semesters showed statistically significant gains in writing.

The writing test results demonstrate that the College Skills population was in need of basic writing skills instruction and that for the most part the results of that instruction were beneficial and did result in improved writing skills.

TABLE 4

WRITING PRE TO POST-TEST SCORES FOR COLLEGE SKILLS STUDENTS BY LEVEL - FALL 1988

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
CSK011/012	20	3.50	.761	4.80	1.51	4.10	.001
SS	2	4.00	.00	5.00	1.41	1.00	NS
no	18	3.44	.784	4.78	1.54	3.89	.001
CSK013	59	4.44	1.02	5.46	1.47	4.69	.000
SS	15	4.67	.98	5.53	1.25	2.48	.027
no	44	4.36	1.04	5.43	1.55	4.00	.000
CSK014	42	5.17	1.10	5.95	1.56	3.18	.003
SS	6	5.50	1.23	6.67	1.63	2.91	.034
no	36	5.11	1.09	5.83	1.54	2.57	.014
CSK028	67	3.97	.17	6.25	1.28	14.25	.000
SS	5	3.80	.45	6.00	1.41	3.32	.029
no	62	3.98	.13	6.27	1.28	13.76	.000
CSK071	16	5.00	1.03	5.81	1.56	1.93	NS
SS	1	4.00		4.00			
no	15	5.07	1.03	5.93	1.53	1.94	NS

TABLE 5

WRITING PRE TO POST-TEST SCORES
FOR COLLEGE SKILLS STUDENTS
BY LEVEL - SPRING 1989

	Pre-Test			Post-Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
CSK011/012	9	3.33	.866	3.57	.882	.80	NS
SS	6	3.17	.983	3.33	1.03	.42	NS
no	3	3.67	.577	4.00	.00	1.00	NS
CSK013	25	4.28	.936	5.32	1.55	4.58	.000
SS	2	4.00		4.00			
no	23	4.30	.974	5.43	1.56	4.75	.000
CSK014	9	4.56	1.42	5.56	1.67	1.55	NS
SS	0						
no	9						
CSK028	22	3.95	.21	5.45	1.26	5.41	.000
SS	4	4.00	.00	5.50	1.00	3.00	.058
no	18	3.94	.24	5.44	1.34	4.60	.000
CSK071	19	4.68	1.06	5.58	1.43	3.92	.001
SS	0						
no	19						

TABLE 6

WRITING PRE TO POST-TEST SCORES
FOR COLLEGE SKILLS STUDENTS
BY LEVEL - FALL 1988 AND SPRING 1989

	Pre-Test			Post-Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
CSK011/012	1	4.00		4.00			
SS	1	4.00					
no	0						
CSK013	4	4.50	1.00	4.00	.00	1.00	NS
SS	1	4.00		4.00			NS
no	3	4.67	1.16	4.00		-1.00	NS
CSK014	20	5.75	1.12	5.60	1.05	- .42	NS
SS	5	5.00	.89	5.60	.89	.00	NS
no	15	5.80	1.21	5.60	1.12	- .46	NS
CSK028	6	4.00	.00	5.00	1.00	2.24	NS
SS	2	4.00	.00	5.00	1.41	1.00	NS
no	4	4.00	.00	5.00	1.16	1.73	NS
CSK071	2	4.00	.00	4.00			NS
SS	1	4.00		4.00			NS
no	1	4.00		4.00			NS

MATHEMATICS

Students whose Mathematics Placement Examination scores indicated that they had not yet reached the level established as an indication of competency were assigned to Mathematics Skills CSK065. This course has been designed for students with remedial and developmental skill needs in mathematics and operates on a highly individualized basis. Students are assigned work in specific modules based on their diagnosed areas of need. Their progress is carefully monitored and their final grades reflect the degree to which they have mastered the content. In order to receive a P (pass) grade, a student has to complete the modules assigned and to achieve 100% accuracy on the tests associated with each module. An IP (in progress) grade was assigned to those students who had made significant progress in their work and were close to completing their assigned modules. Students who had not demonstrated sustained work and therefore not made satisfactory progress were assigned a U (unsatisfactory) grade.

Table 7 contains the results of the Fall semester, 1988 and Table 8 contains the results of the Spring semester, 1989. The levels of P and IP grades combined are similar to those for prior years (range 82-85% Fall semesters, 75-79% Spring semesters). The current year figures are 84% Fall, 1988, 74% Spring, 1989. The evening students in the Fall present a somewhat different picture. The combined P/IP grades are 66%. Concern over the much higher failure rate in

this group prompted the implementation of an intervention strategy for the evening students in the Spring. When students were not in attendance at the Mathematics Lab for one week, they were called at home and urged to attend. The results of this immediate intervention are striking. In the Spring, 1989 semester the combined P/IP grades were 85%. There can be no question that students enrolled in Mathematics Skills continue to demonstrate growth.

TABLE 7

NUMBER AND PERCENTAGES OF
STUDENTS RECEIVING GRADES IN
MATHEMATICS SKILLS CSK 065, FALL 1988

		P		IP		U	
Group	N	N	%	N	%	N	%
Day	201	136	67.67	32	15.92	33	16.42
Evening	38	13	34.21	12	31.58	13	34.21

TABLE 8

NUMBER AND PERCENTAGE OF
STUDENTS RECEIVING GRADES IN
MATHEMATICS CSK 065 - SPRING 1989

		P		IP		U	
GROUP	N	N	%	N	%	N	%
Day	169	98	57.99	27	15.98	44	26.04
Evening	26	7	26.92	15	57.69	4	15.38

ENGLISH AS A SECOND LANGUAGE

Many of the students who require remedial and developmental instruction are those for whom English is a non-native language. This instruction which includes practice in oral and written English is carried out on the Main Campus of Rockland Community College and at two off campus Learning Centers, Spring Valley and Haverstraw. Because the curricula, amount of instruction and methodologies vary greatly from site to site, each Center's results are treated separately in the data.

Students' placements in sections of classes and subsequent instructional emphases are determined by performance on the English Placement Examination (scores on a writing sample and scores on the DTLS), the English Language Institute Test and by personal interview.

Each of the Learning Centers has its own sequence and configuration of classes for ESL students. The sequence at Main Campus is primarily for full time students; ESL 035/036 is the lowest level and ESL 071 is the highest. Haverstraw uses the same numbering system as Main Campus for its courses for fulltime students and the same numbering as Spring Valley for its courses for part-time students. All of the courses in ESL at Spring Valley are for part-time students, with ESL 030 the lowest level and ESl 061 as the highest level. It is important to emphasize that the criteria for entry and exit from the levels and that the curricula for the levels vary

from site to site making comparisons within levels but across sites very virtually impossible.

READING

Tables 9-11 show the results of reading test scores for students enrolled in Fall 1988, Spring 1989 and Fall and Spring Continuing respectively. Within sites, the data are presented separately for each level and where available students receiving additional services through the Special Services Project are identified.

The data present a mixed picture. At each site some students made statistically significant gains in reading. Generally those students who were initially placed in higher levels made significant gains while those who were placed in lower levels did not.

Table 9

DTLS PRE TO POST-TEST SCORES FOR
ESL STUDENTS BY LEARNING CENTER - FALL 1988

		Pre - Test		Post - Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
Main Campus *							
ESL035/036	25	2.44	3.48	1.56	1.42	-1.16	NS
ESL045/046	87	2.77	3.08	3.44	2.99	1.42	NS
ESL055	43	4.72	3.20	6.40	7.47	2.88	.006
ESL065	58	7.22	3.31	9.67	4.96	3.27	.002
ESL071	18	11.50	4.64	10.72	4.89	-.60	NS
Spring Valley (All part-time -order is hierarchical)							
All ESL030	24	1.33	1.27	1.29	1.04	-.12	NS
SS	3	1.00	.00	1.00	.00		
All ESL040	30	1.63	1.52	1.87	1.77	.57	NS
SS	6	1.67	1.63	2.00	1.68	1.00	NS
All ESL041	28	3.68	4.27	2.14	1.69	-1.83	NS
SS	3	1.00	00	1.33	.58	1.00	NS
All ESL061	44	3.84	2.78	7.48	5.09	5.09	.001
SS	3	3.33	2.08	4.67	2.08	.55	NS
Haverstaw							
All ESL035/036	27	1.15	.36	1.96	1.53	2.99	.006
SS	22	1.18	.40	1.86	1.61	2.99	.040
All ESL045/046	17	1.47	.80	2.53	1.08	2.87	.01
SS	5	1.40	.55	2.40	1.67	1.12	NS

*There were no ss students on Main Campus

TABLE 10

DTLS PRE TO POST-TEST SCORES FOR
ESL STUDENTS - SPRING 1989

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
Main Campus							
ESL035/036	22	1.64	1.05	1.82	1.87	.44	NS
SS	9	1.67	1.12	1.22	.44	-1.32	NS
ESL045/046	41	2.46	2.35	5.54	4.21	4.81	.001
SS	9	3.33	2.24	6.32	3.02	1.70	NS
ESL055	14	3.93	2.79	6.57	3.59	2.57	.024
SS	3	2.33	2.31	5.33	5.13	1.73	NS
ESL065	29	7.45	4.88	9.55	5.18	1.56	NS
SS	3	6.67	4.51	5.67	3.22	-.33	NS
* ESL071	10	9.50	3.87	10.00	3.86	.37	NS
Spring Valley *							
ESL030	5	1.00	.00	1.00	.00	.00	NS
ESL040	16	4.19	4.85	2.63	2.71	-.99	NS
ESL041	20	3.00	2.75	4.80	3.89	2.59	.02
ESL061	16	4.37	2.75	11.25	5.52	5.08	.001
Haverstraw							
ESL035/036	13	1.00	.00	1.54	.97	2.01	NS
SS	7	1.00	.00	1.86	1.07	2.12	NS
ESL045/046	5	1.20	.45	2.60	2.61	1.12	NS
SS	1	1.00		1.00			
* ESL030	11	1.00	.00	1.73	1.42	1.70	NS
* ESL040	6	2.17	1.17	4.67	5.32	1.35	NS

*There were no ss students in this sub-group

TABLE 11

DTLS PRE TO POST-TEST SCORES FOR
ESL STUDENTS CONTINUING FROM
SPRING 1989 TO FALL 1989

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
Main Campus							
All ESL035/036	3	1.33	.55	1.00	.00	.00	NS
SS	3	1.33	.55	1.00	.00	.00	NS
All ESL045/046	49	2.27	1.62	4.04	3.65	3.18	.003
SS	27	2.26	1.43	3.56	3.30	1.83	[illegible]
ESL055	22	3.68	2.03	7.86	4.13	3.79	.001
SS	6	3.50	2.17	6.67	5.09	1.20	NS
ESL065	26	6.85	2.46	8.00	3.98	1.38	NS
SS	4	7.00	2.94	6.50	4.20	-.18	NS
ESL071	16	8.13	3.79	10.06	2.59	1.78	NS
SS	1	2.00	.00	13.00	.00	.00	-
Spring Valley							
ESL030	2	3.50	3.54	1.00	.00	1.00	NS
ESL040	15	1.47	1.55	1.60	1.35	.26	NS
SS	4	1.00	.00	1.00	.00		NS
All ESL041	21	2.00	1.45	2.86	2.22	1.81	NS
SS	3	1.67	.58	3.33	2.31	1.39	NS
All ESL061	25	3.81	3.84	6.96	5.21	3.60	.001
SS	2	3.00	1.41	8.00	1.41	2.50	NS
Haverstraw							
All ESL035/036	12	1.08	.29	1.75	1.42	1.61	NS
SS	11	1.09	.30	1.82	1.47	1.62	NS
All ESL045/046	12	1.92	1.56	3.08	2.28	1.25	NS
SS	7	1.86	1.86	3.71	2.69	1.31	NS

WRITING

Tables 12-14 show the results of writing test scores for students in Fall 1988, Spring 1989 and Fall and Spring continuing respectively. Growth in writing skills occured at all sites for most students as demonstrated by statistically significant gains. As with students' reading skills, their writing skills were more likely to improve if they were initially placed at the higher levels. However, it should be noted that statistically significant gains in writing were more pervasive than were gains in reading. One may hypothesize that the increases and integrated tutoring available to students and the increased availability of Computer Assisted Instruction, especially word processing, may have produced this salutory effect on writing skills.

TABLE 12

WRITING PRE TO POST-TEST SCORES FOR
ESL STUDENTS BY LEARNING CENTER
FALL 1988

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
Main Campus *							
ESL035/036	22	1.32	1.09	2.23	.61	4.18	.001
ESL045/046	87	3.33	.95	3.72	.79	3.72	.001
ESL055	42	4.05	.76	4.52	.89	3.84	.001
ESL065	58	4.17	.94	4.97	1.08	4.77	.001
ESL071	24	4.42	.83	5.54	1.10	4.05	.001
Spring Valley							
ESL030	15	2.00	.00	2.07	.26	1.00	NS
SS	2	2.00	.00	2.00	.00	.00	NS
ESL040	26	2.50	.76	2.92	.98	2.03	NS
SS	4	2.50	.00	2.50	.00	.00	NS
ESL041	26	2.69	.84	3.58	.70	4.37	.001
SS	2	2.00	.00	3.50	.71	3.00	NS
ESL061	43	3.95	.72	4.72	1.24	4.37	.001
SS	3	4.00	.00	4.00	.00	.00	NS
Haverstraw							
ESL035/036	3	2.00	.00	2.67	1.16	1.00	NS
SS	2	2.00	.00	3.00	1.41	1.00	NS
ESL045/046	14	1.64	.93	2.43	.65	3.67	.003
SS	5	1.00	.71	2.40	.55	3.50	.03

* There were no ss students on Main Campus

TABLE 13

WRITING PRE TO POST-TEST SCORES FOR
ESL STUDENTS BY LEARNING CENTER - SPRING 1989

		Pre - Test		Post - Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
Main Campus							
ESL035/036	22	1.64	1.18	2.45	.67	2.96	.007
SS	10	2.00	1.25	2.50	.85	1.10	NS
ESL045/046	41	2.93	.93	3.61	1.18	3.38	.002
SS	9	2.89	.93	3.56	.53	2.00	NS
ESL055	14	4.08	.60	4.07	.92	.21	NS
SS	3	4.00	.00	3.67	.58	-1.00	NS
ESL065	30	4.17	.65	5.27	1.31	4.75	.001
SS	3	4.00	.00	4.67	1.56	1.00	NS
* ESL071	11	4.36	.81	5.45	.93	2.63	.025
Spring Valley							
* ESL030	4	.50	1.00	2.25	.50	7.00	.006
* ESL040	16	2.63	1.20	3.38	.81	2.82	.02
* ESL041	20	3.70	1.42	3.65	.93	-.20	NS
* ESL061	17	4.18	.95	4.71	1.31	1.34	NS
Haverstraw							
ESL035/036	13	.54	1.20	.23	.60	.77	NS
SS	7	.14	.38	.29	.76	.42	NS
* ESL045/046	5	1.40	1.52	3.40	1.67	2.83	.05
* ESL030	1	2.00	.00	2.00	.00	.00	NS
* ESL040	5	2.40	1.52	2.80	1.10	.59	NS

* There were no ss students in this sub-group

TABLE 14

WRITING PRE TO POST-TEST SCORES FOR
ESL STUDENTS CONTINUING FROM
FALL 1988 TO SPRING 1989

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
Main Campus							
* ESL035/036	3	2.00	.00	2.00	.00	.00	NS
ESL045/046	49	3.27	.95	3.08	.76	-1.22	NS
SS	27	3.30	.78	3.15	.72	- .78	NS
ESL055	22	3.95	.21	3.95	1.17	.00	NS
SS	6	4.00	.00	3.67	.52	-1.58	NS
ESL065	26	4.15	.54	4.65	1.02	2.31	.03
SS	4	4.00	.00	4.00	.00	.00	NS
* ESL071	17	4.65	1.06	5.76	1.39	3.78	.002
Spring Valley							
* ESL030	2	2.00	.00	2.00	.00	.00	NS
ESL040	14	1.93	.62	2.64	.75	3.24	.006
SS	4	2.25	.50	2.50	.58	1.00	NS
ESL041	20	2.75	.85	3.35	1.14	2.26	.04
SS	2	2.00	.00	3.00	1.41	1.00	NS
ESL061	28	3.39	.88	4.79	1.23	5.49	.001
SS	2	3.50	.71	5.00	1.41	3.00	NS
Haverstraw							
ESL035/036	10	.200	.00	.200	.00	.00	NS
SS	9	.22	.67	.22	.67	.00	NS
ESL045/046	12	2.08	1.17	2.83	.72	2.28	.04
SS	7	2.00	1.53	2.71	1.37	1.37	NS

* There were no ss students in this sub-group

ENGLISH LANGUAGE SKILLS

Students in ESL also take the English Language Institute Test (ELI) which includes measures of general language usage, grammar, syntax, idiom and aural skills. Tables 15-17 show the results of this test for students in Fall 1988, Spring 1989 and Fall and Spring continuing respectively. Most students demonstrated statistically significant gains in general language skills. The exceptions were some of the lower level students at Haverstraw and some of the higher level students at Main Campus and Spring Valley.

TABLE 15

ENGLISH LANGUAGE INSTITUTE TEST SCORES FOR
ESL STUDENTS BY LEARNING CENTER - FALL 1988

	Pre - Test		Post - Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
Main Campus							
* ESL035/036	20	16.75	7.01	26.65	7.76	8.87	.001
* ESL045/046	61	31.26	8.07	39.46	5.89	9.21	.001
* ESL055	22	39.00	8.88	42.73	9.85	7.13	.001
* ESL065	14	44.00	3.57	45.57	3.25	2.96	.01
Spring Valley							
All ESL030	25	13.48	6.23	19.60	11.19	3.47	.002
SS	4	9.75	9.22	15.50	11.09	3.48	.04
All ESL040	35	26.91	6.02	34.66	8.75	5.78	.001
SS	6	27.17	3.49	31.17	7.89	1.54	NS
All ESL041	27	36.96	5.27	41.67	4.94	6.41	.001
SS	3	34.00	9.17	41.00	6.08	2.18	NS
All ESL061	41	43.95	2.61	45.41	2.67	3.31	.002
SS	3	44.33	2.08	45.67	2.31	4.00	NS
Haverstraw							
All ESL035/036	27	12.44	7.07	19.93	7.39	6.69	.001
SS	22	12.50	7.65	19.32	7.44	5.30	.001
All ESL045/046	16	27.38	8.75	30.31	8.59	2.17	.05
SS	5	27.40	8.20	31.40	7.80	1.17	NS

* There were no ss students in this sub-group

TABLE 16

ENGLISH LANGUAGE INSTITUTE TEST SCORES FOR
ESL STUDENTS BY LEARNING CENTER - SPRING 1989

		Pre - Test		Post - Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
Main Campus							
All ESL035/036	17	23.18	6.01	32.82	6.21	6.65	.001
035/036 SS	6	23.33	4.46	34.17	6.05	3.54	.02
All ESL045/046	35	33.80	8.87	41.11	6.07	6.04	.001
045/046 SS	9	33.11	7.83	40.78	4.68	5.08	.001
* ESL055	12	43.17	2.62	44.33	1.56	1.90	NS
Spring Valley							
* ESL030	12	11.25	8.63	18.58	10.38	4.69	.001
* ESL040	20	29.65	6.12	36.15	7.55	4.07	.001
* ESL041	20	39.05	4.44	41.90	3.61	3.02	.01
* ESL061	19	44.53	2.25	45.53	2.50	1.91	NS
Haverstraw							
All ESL035/036	15	13.67	10.13	16.73	10.22	1.19	NS
035/036 SS	8	13.25	10.01	15.25	12.66	.50	NS
All ESL045/046	9	27.00	8.89	33.44	7.37	3.75	.006
045/046 SS	3	19.00	3.61	28.67	2.08	4.02	NS
* ESL030	10	5.40	5.66	13.00	3.94	3.34	.01
* ESL040	6	30.33	9.37	29.17	11.70	-.73	NS

* There were no ss students in this sub-group

TABLE 17

ENGLISH LANGUAGE INSTITUTE PRE TO POST-TEST SCORES FOR ESL STUDENTS BY LEARNING CENTER CONTINUING FROM FALL 1988 TO SPRING 1989

	Pre - Test			Post - Test			
Group	N	$\bar{X}$	SD	$\bar{X}$	SD	t	p
Main Campus							
All ESL035/036	4	17.75	4.03	28.00	3.46	4.63	.02
SS	4	17.75	4.03	28.00	3.46	4.63	.02
All ESL045/046	23	34.39	7.73	39.52	4.79	3.88	.001
SS	15	33.13	7.50	38.87	5.50	3.41	.004
All ESL055	17	43.35	2.98	43.53	3.39	.18	NS
SS	4	41.50	2.65	43.50	3.51	1.85	NS
Spring Valley							
* ESL030	3	6.00	2.00	10.00	2.65	6.93	.02
ESL040	14	22.00	7.50	27.86	6.60	2.73	.02
SS	4	20.25	6.50	28.50	5.80	2.82	NS
ESL041	24	37.21	5.22	38.58	6.38	1.44	NS
SS	3	33.00	6.63	33.75	9.88	.33	NS
ESL061	27	43.56	3.61	43.19	4.34	- .51	NS
SS	2	45.50	3.54	40.00	4.24	-2.30	NS
Haverstraw							
All ESL035/036	9	21.11	5.95	22.57	9.72	.61	NS
SS	8	20.13	5.52	20.75	8.63	.25	NS
All ESL045/046	9	29.22	10.67	32.89	9.70	3.44	.01
SS	7	28.29	11.86	31.86	10.92	2.90	.03

* There were no ss students in this sub-group

COMPARATIVE ANALYSIS

The Developmental Studies Department encompasses several different programs conducted at the Main Campus of Rockland Community College and two other learning centers, Spring Valley and Haverstraw. We have hypothesized that the population served by English as a Second Language, College Skills, the Special Services Project, and the three different sites for which ESL is provided are different. Although our research over the years has shown that there is growth in reading, writing and general language skills within all programs and across all sites, it has also shown that this growth varies by program and by site and is affected by students' entering skill levels and by the various curricula. In an effort to document the differences among groups we have performed several analyses of covariance on the data.

An analysis of covariance is a statistical test which analyzes the sources of variation among groups on a single variable. For instance, in analyzing differences among groups on writing skills, post-test writing scores would be the variable under study. Because the groups vary initially on writing skills, that is before instruction occurs, pre-test writing scores are utilized as the covariate. In effect, the differences among groups in entering levels of writing skills are removed statistically by adjusting the post-test means of the various groups. This statistical manipulation results in post-test means being adjusted downward for those groups entering with the highest levels of

skills and conversely results in post-test means being adjusted upward for those groups entering with the lowest levels of skills. The overall result is to compensate for the differences in entering levels of skills on the variable under study to determine if there remain differences in post-test scores among groups. If such differences do exist, they can then be attributed to one or more of the possible sources of variation in one analysis, namely, program, site, level or Special Services Project status.

Table 18 shows a 2X3 analysis of covariance for ESL on post-test writing scores with pre-test writing scores the covariate. There are six cells (groups) in the analysis: Main Campus-Special Services, Main Campus-Non-Special Services, Spring Valley- Special Services, Spring Valley-Non-Special Services, Haverstraw-Special Services, Haverstraw-Non-Special Services. In other words, there are two conditions (Special Services, Non-Special Services) and three sites (Main, Spring Valley, Haverstraw). In addition, the table has totals for columns (sites) and totals for rows (conditions) and a grand mean or average for the entire population. In the table the numbers within each cell are means or averages for each group and the numbers in parentheses are the number of subjects in the cell. From this table we can see that non-Special Services students at Main Campus achieved a post-test mean of 4.24 in writing; their counterparts at Spring Valley achieved a 3.80 mean score and at Haverstraw the group achieved a 2.21 score. For Special Services students, those at Main Campus had a 3.29 score, those at Spring Valley had a 3.04 score and those

at Haverstraw had a 1.39 score. These mean scores are the unadjusted mean post-test scores for each of the six groups. The second part of the table describes the results of the analysis of covariance. (In this part of the table the sources of variation are listed at the left.) The sources under investigation are the main effects, Special Services Project status and sites. In this analysis both main effects are statistically significant.

There were statistically significant differences in the post-test writing scores of Special Services students (M=2.75, n=120) and non-Special Services students (M=4.00, n=642) after these scores were adjusted for entering levels of writing skills. This fact suggests that effects of the additional services provided as part of the Special Services Project did not have the desired result. Even after instruction, students in Special Services did not perform at comparable levels to non-Special Services students in writing skills. Similarly, there were statistically significant differences between post-test writing scores of students at the Main Campus (M=4.11, n=467) Spring Valley (M=3.75, n=231) and Haverstraw (M=1.81, n=64) Centers. The differences in post-test writing scores at the three sites suggests that there are differences in the student populations served, the instructional services provided and/or curricula offered at the three Centers. There were no significant interaction effects which means that the variations among the six cells do not reach statistical significance individually.

Finally, the covariate was statistically significant

which means that the pre-test scores do vary significantly from the post-test scores demonstrating that all students in ESL made gains in writing skill.

TABLE 18

2X3 ANALYSIS OF COVARIANCE FOR ESL/SPECIAL SERVICES BY SITE ON POST-TEST WRITING WITH PRE-TEST WRITING AS COVARIATE

CELL MEANS

		MAIN	SPRING VALLEY	HAVERSTRAW	TOTAL ROWS
NO	SS	4.24	3.80	2.21	4.00
	(n)	(401)	(208)	(33)	(642)
	SS	3.29	3.04	1.39	2.75
	(n)	(66)	(23)	(31)	(120)
Total Columns		4.11	3.73	1.81	3.80
		(467)	(231)	(64)	(762)

ANALYSIS OF VARIANCE

SOURCE OF VARIATION	SUM of SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
Pre Writing	731.436	1	731.436	600.05	.000
Main Effects					
SS	29.84	1	29.84	24.48	.000
Sites	22.34	2	11.12	9.12	.000
Interactions-2 way					
Site X SSP status	3.05	2	1.52	1.25	NS

Table 19 reports the results of a 2X3 analysis of covariance for ESL on post-test DTLS scores with pre-test DTLS scores as the covariate. Examination of the cell means for columns and rows in combination with the part of the table dealing with sources of variation shows that both of the main effects, Special Services Project status and sites, and the covariate effect are statistically significant. Thus as with the writing scores, all students showed gains in reading scores from pre- to post tests, but the gains differed for students at the three sites and in the two conditions.

TABLE 19

2X3 ANALYSIS OF COVARIANCE FOR ESL/SPECIAL SERVICES
BY SITE ON POST-TEST DTLS WITH
PRE-TEST DTLS AS COVARIATE

CELL MEANS

		MAIN	SPRING VALLEY	HAVERSTRAW	TOTAL ROWS
NO	SS	6.66	4.53	2.63	5.65
	(n)	(397)	(219)	(51)	(667)
	SS	4.28	2.68	2.13	3.19
	(n)	(65)	(28)	(53)	(146)
Total Columns		6.32	4.32	2.38	5.21
		(462)	(247)	(104)	(813)

ANALYSIS OF VARIANCE

SOURCE OF VARIATION	SUM of SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
Pre DTLS	3459.34	1	3459.34	179.19	.000
Main Effects					
SS	152.35	1	152.35	7.89	.005
Sites	400.22	2	200.11	10.37	.000
Interactions-2 way					
Site X SSP status	20.55	2	10.27	.53	NS

The 2X3 analysis of covariance for ESL on post-test English Language Institute Test scores with pre-test ELI test scores as the covariate in Table 20 shows the same pattern of gain for general language scores as for reading and writing test scores. The significant covariate effect indicates gains for all students in general language development, and the statistically significant variance attributable to the main effect sites indicates differential growth in language skills at the three sites. The fact that the main effect related to Special Services Project status was not significant indicates that the additional services provided through the project were having the desired effect of making the project students more like their non-project counterparts.

TABLE 20

2X3 ANALYSIS OF COVARIANCE FOR ESL/SPECIAL SERVICES
BY SITE ON POST-TEST ELI
PRE-TEST ELI AS COVARIATE

CELL MEANS

		MAIN	SPRING VALLEY	HAVERSTRAW	TOTAL ROWS
No	SS	39.30	37.44	24.76	36.86
	(n)	(186)	(237)	(49)	(472)
	SS	38.41	32.60	22.65	29.96
	(n)	(39)	(30)	(53)	(122)
Total Columns		39.15 (225)	36.90 (267)	23.45 (102)	35.44 (594)

ANALYSIS OF VARIANCE

SOURCE OF VARIATION	SUM of SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
Pre ELI	56675.25	1	56675.25	1845.895	.000
Main Effects					
SS	25.181	1	25.181	.82	NS
Sites	1815.54	2	907.77	29.57	.000
Interactions-2 way					
Site X SSP status	28.94	2	14.47	.471	NS

The next two analyses were performed on data from College Skills students. Table 21 reports the results of a one-way analysis of covariance for College Skills students on post-test writing scores with pre-test writing scores as the covariate, and Table 22 reports the results of a one-way analysis of covariance for College Skills students on post-test DTLS scores with pre-test DTLS scores as the covariate. In these two analyses the only main effect is the students' project status, that is whether students were or were not receiving additional services through the Special Services Project. College Skills students showed gains in both writing and reading (in both tables, the effect of the covariate is statistically significant). The main effect of project status was not statistically significant for reading and writing. Thus when the post-test means were statistically adjusted for the fact that project students had lower entry scores in reading and writing and thus were more in need of additional services, there were no significant differences between the post-test scores of project and non project students.

These two analyses suggest that for College Skills students the additional services provided through the Special Services Project are having the desired effect of making the project students more like their non-project counterparts in terms of reading and writing skills.

TABLE 21

ONE-WAY ANALYSIS OF COVARIANCE FOR
COLLEGE SKILLS ON POST-TEST WRITING
WITH PRE-TEST WRITING AS COVARIATE

CELL MEANS

	CS
No SPEC. SERV.	5.65
(n)	(271)
SPEC. SERV.	5.24
(n)	(51)
Total Columns	5.59
	(322)

ANALYSIS OF VARIANCE

SOURCE OF VARIATION	SUM of SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
Pre-Writing	49.65	1	49.65	24.25	.000
Main Effects					
SS Status	7.32	1	3.58	.059	NS

TABLE 22

ONE-WAY ANALYSIS OF COVARIANCE FOR
COLLEGE SKILLS ON POST-TEST DTLS
WITH PRE-TEST DTLS AS COVARIATE

CELL MEANS

	CS
No SPEC. SERV.	10.65
(n)	(285)
SPEC. SERV.	8.11
(n)	(54)
Total Columns	10.25
	(339)

ANALYSIS OF VARIANCE

SOURCE OF VARIATION	SUM of SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
Pre DTLS	1940.00	1	1940.00	86.68	.000
Main Effects					
SS Status	71.28	1	71.28	3.18	NS

The next two sets of analyses report the results of a 2x2 analysis of covariance comparing ESL and College Skills students and Special Services Project participants and non participants. Table 23 reports on post-test writing scores with pre-test writing scores as the covariate and Table 24 reports on post-test DTLS scores with pre-test DTLS scores as the covariate. The results of the two analyses are similar.

These two tables show that the two main effects of program (ESL or CS) and project status (SS and non-SSP) and the covariate effect are all statistically significant for both writing and reading. All students in all programs grew in writing and reading. However, the post-test scores in both writing and reading even after adjusting for differences in entry level skills, were different for different groups. College Skills students' average scores were higher than ESL students' average scores; non-project students' average scores were higher than project students' average scores. These analyses must be dealt with carefully. All ESL students at all levels and at all learning sites are grouped together. All College Skills students regardless of level are grouped together. Given this caution, it is apparent that the average levels of reading and writing skills are greater for College Skills students than for ESL students, and the average levels of reading and writing skills for project participants are lower than for non-participants, especially if those students are ESL students. Besides the differences in students, attention must be paid to the quality and quantity of instruction provided within the various categories. The project services seem to be

insufficient to surmount the problems presented by the lower level ESL students. The data show that average post-test scores in reading and writing for College Skills students approach the College cut-off scores for entry into the mainstream whereas those for ESL students don't begin to come close. These data suggest that there are probably differences between the two programs in terms of the numbers of students functioning at lower skill levels and in terms of the efficacy of instruction.

TABLE 23

2X2 ANALYSIS OF COVARIANCE, SPECIAL SERVICES BY PROGRAM ON POST-TEST WRITING WITH PRE-TEST WRITING AS COVARIATE

CELL MEANS

	ESL	CS	TOTAL ROWS
No SS	4.00	5.65	4.49
(n)	(643)	(271)	(914)
SS	2.75	5.24	3.49
(n)	(120)	(51)	(171)
Total Columns	3.80	5.59	4.33
	(763)	(322)	(1085)

ANALYSIS OF VARIANCE

SOURCE OF VARIATION	SUM of SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
Pre Writing	1284.44	1	1284.44	852.41	.000
Main Effects					
SS/No SS	53.79	1	53.79	35.70	.000
ESL/CS	199.93	1	199.93	132.69	.000
Interactions-2 way					
SS X ESL/CS	2.75	1	2.75	1.83	NS

TABLE ??

2X2 ANALYSIS OF COVARIANCE SPECIAL SERVICES
BY PROGRAM ON POST-TEST DTLS WITH
PRE-TEST DTLS COVARIATE

CELL MEANS

		ESL	CS	TOTAL ROWS
No	SS	5.66	10.65	7.15
	(n)	(668)	(285)	(953)
	SS	3.19	8.11	4.52
	(n)	(146)	(54)	(200)
Total Columns		5.21	10.25	6.69
		(814)	(339)	(1153)

ANALYSIS OF VARIANCE

SCURCE OF VARIATION	SUM of SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
Pre DTLS	9665.55	1	9665.55	469.11	.000
Main Effects					
SS status	332.82	1	332.82	16.15	.000
ESL/CS	1750.25	1	1750.25	84.95	.000
Interactions-2 way					
SS X ESL/CS	1.60	1	1.60	.078	NS

One final set of analyses was done for ESL in an effort to pinpoint differences between various sub-groups within the program. Tables 25,26,and 27 show the results of 4X3X2 Analyses of Covariance on post-test writing, reading, and ELI test scores respectively with the pre-test scores of the same variable as the covariate. Table 25 shows that the main effects of site, level and project status and the covariate effect and the two-way interaction effect of site X level are significant. We have already discussed the differences attributable to project status and site in the first set of Analysis of Covariance tables (18,19,20). This analysis suggests that when one considers level of initial placement in conjunction with site and project status there are still differences between students' post-test scores in writing. In fact, the greatest differences in students' scores occur between students at various levels. The next greatest difference is between sites. The next is between statuses. The significant interaction effect of site X level suggests that different levels have different meanings at different sites so that the effect of being at a particular site in a particular level is exacerbated.

Finally, the significant covariate effect means that all students in the population showed growth in writing. Tables 26 and 27 report almost the same results for reading and general language usage skills. The main effects of site and level, the two-way interaction of site X level and the covariate effects are all significant; the main effect of project status is not significant. In reading and general language usage additional services provided by the Special

Services Project are having the desired effect of minimizing the differences between project and non project students. These data underline the point made earlier about the differential effects on students of their initial level of placement and of the site where the instruction occurs. Finally, the data show that no level of initial placement at any site produces average post-test scores in reading or writing that approach the cut-off score for entry into the mainstream of the College. This fact suggests a need for some baric restructuring in the method of making initial placements in terms of criteria and of consistency across sites.

TABLE 25

THREE WAY ANALYSIS OF COVARIANCE:
POST-TEST WRITING BY SITE, LEVEL
AND SPECIAL SERVICES STATUS WITH
PRE-TEST WRITING AS THE COVARIATE

ANALYSIS OF VARIANCE

SOURCE OF VARIATION	SUM of SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
Pre Writing	602.06	1	602.06	669.23	.000
Main Effects					
Site	35.36	2	17.68	19.65	.000
Level	166.04	3	55.35	61.52	.000
SS	9.19	1	9.19	10.21	.001
Interactions-2 way					
Site X Level	25.41	6	4.24	4.71	.000
Site X SS	.87	2	.44	.48	NS
Level X SS	2.51	3	.84	.93	NS
Interactions-3 way					
Site X Level X SS	1.70	4	.43	.47	NS

TABLE 26

THREE WAY ANALYSIS OF COVARIANCE:
POST-TEST DTLS BY SITE, LEVEL
AND SPECIAL SERVICES STATUS WITH
PRE-TEST DTLS AS THE COVARIATE

ANALYSIS OF VARIANCE

SOURCE OF VARIATION	SUM of SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
Pre DTLS	2417.76	1	2417.76	159.19	.000
Main Effects					
Site	598.41	2	299.21	19.70	.000
Level	2859.20	3	953.07	62.75	.000
SS	6.08	1	6.08	.40	NS
Interactions-2 way					
Site X Level	497.14	6	82.86	5.46	.000
Site X SS	4.27	2	2.13	.14	NS
Level X SS	63.30	3	21.10	1.39	NS
Interactions-3 way					
Site X Level X SS	15.64	4	3.91	.257	NS

TABLE 27

THREE WAY ANALYSIS OF COVARIANCE:
POST-TEST ELI BY SITE, LEVEL
AND SPECIAL SERVICES STATUS WITH
PRE-TEST ELI AS THE COVARIATE

ANALYSIS OF VARIANCE

SOURCE OF VARIATION	SUM of SQUARES	DF	MEAN SQUARE	F	SIGNIF.
Covariate					
Pre ELI	56675.25	1	56675.25	1955.23	.000
Main Effects					
Site	1392.84	2	695.42	24.03	.000
Level	733.44	3	244.48	8.43	.000
SS	17.60	1	17.60	.61	NS
Interactions-2 way					
Site X Level	607.51	6	101.25	3.49	.002
Site X SS	29.84	2	14.92	.52	NS
Level X SS	6.97	3	2.32	.08	NS
Interactions-3 way					
Site X Level X SS	65.44	3	21.82	.75	NS

CONCLUSIONS AND RECOMMENDATIONS

It is important to begin this section by reaffirming that almost all of the groups of students enrolled in Developmental Studies showed progress over the course of the academic year 1988-89. They improved their reading, their writing and their general language skills.

For College Skills students, the mean post-test DTLS score for all students regardless of level was 10.25, just slightly below the cut-off score for demonstrating minimum competence (score = 11). Similarly for writing, the mean post-test writing scores for all College Skills students was 5.59 which approaches the College cut-off score of 6. These scores represent significant progress for the College Skills students. It would lead to the conclusion that for the most part, the placements for students are accurate, the curricula are meeting their needs, and the quantity and quality of instruction are sufficient. The one group for whom the program is not working as well as possible is for the evening students. Although this group gained in reading skills, their writing skills are not developing as rapidly. Generally for most students reading will improve more quickly than writing. Current research on writing suggests that writing is very much tied into a developmental sequence which requires much time and practice in order to achieve fruition. Clearly, time is scarce in the part-time evening sequence. It is also important to bear in mind that the students in the evening sections represent all levels of skill in reading and writing and that the instructors of these sections are

required to develop highly individualized programs for students. There are also more materials available for mediated, individualized instruction in reading than in writing which makes it easier to individualize instruction in reading. All of these factors probably explain the much slower progress of the evening Skills students in developing their reading and writing skills.

Two recommendations for the evening sections are: 1) To find more time for instruction and practice in the part-time evening sections. 2) To identify more mediated, individualized instructional material to supplement the writing curriculum.

Another group for whom there is concern, although the reasons are different, is the group of students who continue in College Skills from Fall to Spring. The first concern is with the numbers. There appear to be fewer continuing students in the Spring Semester than one would expect given the Fall pass rates and number receiving S grades (move up a level) and MP (stay in the same placement) grades. Either there is a data collection problem which means that these students are not being accurately identified or there is an attrition problem for this group. On the assumption (and further checking) that the group is being accurately identified, attrition seems to be the more viable hypothesis. It would seem that students are willing to give themselves one semester of College Skills courses; if they haven't passed into the mainstream in one semester or received placements at the higher levels of College Skills (CSK 014,

CSK 028, CSK 029) which would almost guarantee movement into the mainstream, they seem to be unwilling to continue. However, the second concern is the only spring continuing groups who made progress (Table 3 and Table 6) are CSK 014 and CSK 029 and only in reading. No group of continuing students demonstrated statistically significant gains in writing.

It is difficult to know why students are not continuing or if they are continuing, why they are not demonstrating significant gains. Rather than speculating about all the possible reasons, it would seem more productive to suggest a follow-up interview with <u>all</u> students who did not pass into the mainstream at the end of the Fall semester to ascertain their interest to continue in College Skills, their reasons for not continuing (if that is their intent) and their needs in continuing (if that is their intent). Especially with this latter group, there may be an additional intervention especially in the counseling area that may be helpful to them.

The ESL students within Developmental Studies also showed positive growth patterns, for the most part. All groups demonstrated growth in reading and general language development and most of the groups demonstrated growth in writing skills. But there are some problems which the data reveal. The average post-test scores of students at the end of the academic year are far below the College competency level in both reading and writing. Although students developed more skill over the course of the academic year,

they did not achieve enough skill to be able to enter the College mainstream. It is important to remember that we are looking at averages for each of the levels at each of the Learning Centers; obviously some students did achieve competency level scores in reading and/or writing and were able to enter the mainstream. What is apparent is that there appears to be many more students at lower levels in ESL at all the campuses, than there are in College Skills, and that the program as constituted is experiencing difficulty in raising competency levels within the framework of one academic year.

It would seem that the major factor contributing to the differences in achievement levels between ESL and College Skills students is the presence in ESL of many more students whose reading, writing, and language skills are at very low levels. The presence of lower level students in higher numbers results in lowering of the pre and post-test averages for each of the Centers in each of the variables. Thus many students potentially would spend many more semesters in ESL courses in order to reach the minimum competency level. The bulk of the resources available for the instruction of ESL students are expended on those with the lowest levels of skills. The fact leads to another hypothesis about why the ESL students' average scores are low, namely the nature of the instruction for ESL students.

If students enter ESL with very low levels of proficiency in English, much of the instruction must be designed to improve general language proficiency. The nature of this

instruction focuses on grammar, syntax, idiom and vocabulary development. Development of skill in reading and writing is incidental: reading and writing are utilized as modes through which the major instructional objectives relating to language development are realized. It is only after students have grasped the basic structures, vocabulary and grammar of English, that they can turn their attention to the more learned skills involved in reading and writing the language. In short, once there is basic mastery of the language, the focus can shift to the development of higher levels of reading and writing. It is not that reading and writing do not occur in the lower skill level classrooms; it is that the nature of that reading and writing does not begin to approach the difficulty or complexity required for passing the reading and writing tests and for functioning in college classes conducted in English. Therefore, it is hypothesized that another major factor influencing achievement levels and related to the first factor, the characteristics of the ESL students, is the nature of the instruction, specifically that the objectives of the bulk of the instruction in ESL are to improve language proficiency. That this goal is being met can be seen by the across the board gains for all students on the English Language Institute Test.

Unfortunately, this test has no known norms and no known validity; therefore there is no way to know what the scores mean or how much is enough in order to be able to focus on higher level reading and writing skills. This factor coupled with the fact that neither the DTLS nor the writing sample are useful for making discriminations between students at the

lower end of their scale means that placement in ESL sections reduces itself to some very subjective factors with low levels of consistency both within and across Learning Centers. Thus another factor which may be contributing to the lower levels of achievement is the inadequacy and inconsistency of the placement procedures. The effect of this insufficiency on instruction is that conscientious instructors like those in ESL will modify the curriculum and the instructional objectives to match their students' needs and abilities which in fact in turn impacts negatively on end of semester reading and writing test scores.

These factors may be useful in explaining why the levels of achievement in ESL on the reading and writing tests are low. They also lead to some questions which go to the heart of the ESL sequence in Developmental Studies.

First, there is the question of the ESL students, namely who should be a student within a college-level ESL program? What level of skill and proficiency with the English language should a potential student have? There are constraints which make answering this question a necessity: those associated with the allocation of College resources and those imposed externally by the availability and duration of financial aid. Many colleges deal with this issue by setting minimum proficiency levels for admission to the college-level ESL courses. In the case of students from abroad, results of TOEFL must be at or above certain cut-off levels in order for students to qualify for college admission. In the case of resident students, results of other tests of language

proficiency for which norming and validity data exist must be at or above specified cut-off levels.

Looking at the data that is available on this current group of ESL students suggests that reasonably consistent progress in reading and writing requires entering the sequence at the following levels:

a minimum of 25 on the ELI test
a minimum of 3 on the Writing Sample
a minimum of 4 on the DTLS.

Next, there is the question of the nature of the instruction provided to ESL students within the college-level program. How much instruction should be provided in general language proficiency and how much in the reading and writing skills necessary for achieving satisfactory grades in college courses taught in English? Most colleges provide between one and three semesters of instruction below the level of introductory college courses. Financial aid constraints would dictate a maximum of four semesters if there are a sufficient number of college courses which students can take and which don't rely too heavily on reading and writing as the primary modes of instruction and evaluation. It would seem, however, that the bulk of the instruction should be on improving reading and writing skills in English.

Third, there is the question of how to place students accurately so that they get the kind of instruction they need and can potentially move through the sequence experiencing success and developing the skills they need in order to move

into the mainstream within a predictable and realistic time frame. When the other two major questions have been answered, the answer to this question too will be in hand. Whatever instruments are used to determine admission can also be used along with other assessments in developing criteria for placement and movement between levels. These decisions must be developed utilizing the most objective criteria that can be devised; they must be consistently applied at all the Learning Centers and for all categories of students; ultimately, they must be validated through some kind of empirical analysis.

Finally, there is one last question; what happens to the students who do not have sufficient language proficiency to be admitted to a college-level ESL sequence? The only possible answers are to find, invent or develop a new program (or get someone else to do it) to serve these students and to find, invent or develop alternative funding sources to support this program. Prior years' evaluations have suggested that many of the lower level ESL students have a desire to improve their English language skills but not necessarily an immediate desire to pursue a college education. Developing a literacy program under the aegis of the College but not within the framework of the college curriculum solves the problems of both sets of students-those denied admission because of low proficiency and those desiring only to improve their English proficiency. Completion of this program at a satisfactory level of proficiency would become part of the criteria for admission to the college-level program should an individual desire to

pursue college-level work.

An analysis of the results of the pilot program in English Language Literacy to be undertaken in 1989-90 in cooperation with BOCES at the Haverstraw Center should provide some answers about alternative programs for ESL students with very limited proficiency in English Language Skills.

In summary, the questions raised and the solutions proposed in the preceding pages will require some commitments by the faculty and the administration. There will have to be time set aside for the finding and/or developing of instruments and procedures for admission, placement, and movement. There will need to be time devoted to modifying the curriculum to meet the goals proposed. There will have to be some extensive staff development activities provided in order to provide support for instructors who may be moving in new and different directions. Institutional support in developing a new program and in finding alternative funding will be necessary. In short, these recommendations can only be implemented if the College administration can provide high levels of support in terms of staff-time and effort, released time for faculty, consultant services and staff development activities.

BIBLIOGRAPHY

Martin, Margaret R. and others. "Special Services Project: Rockland Community College, 1977-1980." Resources in Education - ED 267 834.

Martin, Margaret R. and others. "Special Services Project: Rockland Community College, 1980-1981." Resources in Education - ED 267 835.

Martin, Margaret R. and others. "Special Services Project: Rockland Community College, 1981-1982." Resources in Education - ED 267 836.

Martin, Margaret R. and others. "Special Services Project: Rockland Community College, 1982-1983." Resources in Education - ED 267 837.

Martin, Margaret R. and Elaine B. Chapline. "Special Services Project: Rockland Community College, 1983-1984." Resources in Education - ED 267 838.

Martin, Margaret R. and Elaine B. Chapline. "Special Services Project: Rockland Community College, 1984-1985." Resources in Education - ED 267 839.

Martin, Margaret R. and Janet R. Brown. "Special Services Project:
Rockland Community College, 1985-1986."
Resources in Education - ED 267 343.

Martin, Margaret R. and Janet R. Brown. "Special Services Project:
Rockland Community College, 1986-1987."
Resources in Education - ED 267 569.

Janet R. Brown , Martin, Margaret R. and Catherine Davis.
" Developmental Studies Department/Special Services Project:
Rockland Community College, 1987-1988. "
Resources in Education - Accepted For Publication October, 1989.

Appendix A

RCC Competency Assessment Policy

RCC COMPETENCY ASSESSMENT POLICY

To ensure that all students are placed into course work appropriate to their skills, Rockland Community College has a policy of assessing all applicants for placement in English and mathematics courses. The English Assessment consists of a reading comprehension evaluation and a writing sample on a given topic. As a result of these assessments, students may be placed in English Composition, College Skills, or English as a Second Language courses. The Mathematics Assessment includes a required computation section and an algebra section which students are encouraged to take. Students may be placed in Mathematics Skills, College Mathematics, Intermediate Algebra, or one of the more advanced courses offered by the Mathematics Department.

First-Time College Students: All entering students who have not previously attended college and are planning full-time enrollment (12 or more degree credits) should take the English and Mathematics Assessments as soon as possible after acceptance into the College and before registration. This applies to all students, including those at local learning centers and sites.

An entering student does not have to take the English Placement Examination if, in the judgment of the English as a Second Language (ESL) faculty coordinator or College Skills instructor, the student cannot perform on the assessment, is to be placed into a beginning section of ESL or Communication Skills (CS 011 or CS071 or CS072), and will be taking no

other courses. A waiver form for the English Assessment must be signed by the ESL coordinator of Assessment and Placement.

Part-time students who intend to register for a credit-bearing mathematics course must take the Mathematics Assessment before enrolling in the course, regardless of the number of credits already earned.

Part-time students registering for English 101 or Business Correspondence (EN 110,BU 110) must take the English Assessment before enrolling, regardless of the number of degree credits already earned.

All other part-time students enrolling for less than 12 credits will be required to take the English and Mathematics Assessments before registering for their sixteenth degree credit.

Transfer Students: In accordance with Rockland's policy on Advanced Standing, transfer students may be exempt from the English and/or Mathematics Assessment, based on a review of their previous academic record. However, when applying to specific programs, they may be required to take the English and/or Mathematics Assessment.

Appendix B

Special Services Project Tutorial Manual

See Developmental Studies
Department/ Special Services Project
Annual Report, 1987-1988

Appendix C

Special Services Project Taxonomy of Materials

See Developmental Studies

Department/ Special Services Project

Annual Report, 1987-1988